

TWO YEAR LIMITED WARRANTY PROGRAM

This limited warranty program is the only one that applies to this product, and it sets forth all the responsibilities of Vector Manufacturing regarding this product. There is no other warranty, other than those described herein.

This Vector Manufacturing product is warranted, to the original purchaser only, to be free of defects in materials and workmanship for two years from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users. Manufacturer will not be responsible for any amount of damage in excess of the retail purchase price of the product under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty.

This product is not intended for commercial use. This warranty does not apply to accessories or damage to units from misuse or incorrect installation/connection. Misuse includes wiring or connecting to improper polarity power sources.

RETURN/REPAIR POLICY: Defective products, other than accessories, may be returned to manufacturer. Any defective product, other than accessories, that is returned to manufacturer within 30 days of the date of purchase will be replaced free of charge. If such a product is returned more than 30 days but less than two years from the purchase date, manufacturer will repair the unit or, at its option, replace it free of charge.

If the unit is repaired, new or reconditioned, replacement parts may be used, at manufacturer's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under the terms of the remainder of the warranty period. The customer is responsible for the shipping charges on all returned items after 30 days. During the warranty period, manufacturer will be responsible for the return shipping charges.

LIMITATIONS: This warranty does not cover accessories, bulbs, fuses and batteries, defects resulting from normal wear and tear (including chips, scratches, abrasions, discoloration or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire, flood and Acts of God.

If your problem is not covered by this warranty, call Technical Support at (866) 584-5504 for general repair information and charges, if applicable. You may also contact us through our website at wwwvectormfg.com.

STATE LAW RIGHTS: This warranty gives you specific legal rights. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the exclusions or limitations stated herein may not apply. This warranty gives the purchaser specific legal rights; other rights, which vary from state to state, may apply.

TO REQUEST WARRANTY SERVICE FOR THIS PRODUCT: Contact Technical Support by telephone, fax or mail (see below). We suggest that you keep the original packaging in case you need to ship the unit. When returning a product, include your name, address, phone number, dated sales receipt (or copy) and a description of the reason for return and product serial number. After repairing or replacing the unit, we will make every effort to return it to you within four weeks.

WARRANTY ACTIVATION: Please complete Warranty Activation Card and mail to Vector Manufacturing. Enter "VEC13" as Model and "START-IT Jump-Starter" as Product Type. All Vector products must be registered within 30 days of purchase to activate this warranty. Mail the completed registration form, along with a copy of the original sales receipt to:

ATTN: CUSTOMER SERVICE
4140 SW 30th Ave., Ft. Lauderdale, FL 33312
• TOLL FREE: (866) 584-5504 • FAX: (954) 584-5556 •

WARRANTY IS NON-TRANSFERABLE AND NON-REFUNDABLE.

BD060805

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MADE IN CHINA



START-IT

Jump-Starter

12 Volt DC Power Supply

Cordless • Rechargeable



USER'S MANUAL & WARRANTY INFORMATION

IMPORTANT SAFETY INFORMATION, SAVE THESE INSTRUCTIONS

TO REDUCE THE RISK OF INJURY, USER MUST READ AND UNDERSTAND THIS INSTRUCTIONAL MANUAL. THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING THE OPERATION AND WARRANTY OF THIS PRODUCT. PLEASE RETAIN FOR FUTURE REFERENCE.

4140 S.W. 30th Ave., Ft. Lauderdale, FL 33312 U.S.
Toll Free: (866) 584-5504

wwwvectormfg.com

IMPORTANT SAFETY INSTRUCTIONS

1. When working with lead acid batteries, always make sure immediate assistance is available in case of accident or emergency.
2. Always use protective clothing and eyewear when using this product, contact with battery acid may cause blindness and/or severe burns. Be aware of first aid procedures in case of accidental contact with battery acid.
3. There is a risk of explosive gases being released when lead acid batteries are being charged or discharged. Failure to follow instructions may cause property damage, explosive hazard, and/or personal injury.
4. Make sure the power switch is OFF before connecting battery clamps to discharged battery.
5. When charging unit from a 120 volt AC electrical outlet, in any wet or damp area, make sure that the outlet used is protected by a ground fault interrupt (GFCI) outlet.
6. When charging the unit near water, do not allow the electrical cords and outlets to get wet; electrical shock could result.
7. Jump-start procedures should only be performed in a safe, dry, well-ventilated area.
8. Always store battery clamps when not in use. Never touch battery clamps together – this can cause dangerous sparks, power arcing, and/or explosion.
9. When using this unit in proximity to the vehicle's battery and engine, stand the unit on a flat, stable surface, and be sure to keep all clamps, cords, clothing and body parts away from moving vehicle components.
10. Do not wear vinyl clothing when jump-starting a vehicle-friction can cause dangerous static electricity sparks. Remove all jewelry or metal objects that could cause short circuits or react with battery acid.
11. Always disconnect the negative (black) jumper cable first; followed by the positive (red) jumper cable.
12. Never allow red and black clamps to touch each other or another common metal conductor – this could cause damage to the unit and/or create sparking/ explosion hazard. Always store battery clamps when not in use.
13. Do not expose battery to fire or intense heat as it may explode. Before disposing of the battery, protect exposed terminals with heavy-duty electrical tape to prevent shorting (shorting can result in injury or fire).
14. Do not smoke, use matches or cigarette lighters while working on a vehicle's battery system.
15. All wires, cables, and cords must be positioned so they cannot be tripped over or damaged by moving parts, pinching or abrading.
16. NEVER ATTEMPT TO JUMP-START A FROZEN BATTERY.

Note: Read this manual and product labeling carefully before using. Follow recommended warnings, cautions and safety procedures; as well as manufacturer's guidelines for your vehicle battery.

FIRST AID

Skin: If battery acid comes in contact with skin, rinse immediately with water, then wash thoroughly with soap and water. If redness, pain, or irritation occurs, seek immediate medical attention.

Eyes: If battery acid comes in contact with eyes, flush eyes immediately for a minimum of 15 minutes – seek immediate medical attention.

CAUTIONS

Use only the supplied cords/adapters for recharging this unit. Do not recharge for more than 3-4 hours maximum using 12 volt DC method. Recharge unit after each use. All ON/OFF switches should be in the OFF position when the unit is charging or not in use. Make sure all switches are in the OFF position before connection to a power source or load.

Never insert anything other than the supplied power/recharging cords or recommended appliance power/recharging cords into the 12 volt DC charging/power socket on this unit. Do not use any accessory that is not recommended or provided by the manufacturer.

Do not use this unit to operate appliances that draw more than 5 amps.

This system is not designed to be used as a replacement for a vehicular battery. Do not attempt to operate a vehicle that does not have a battery installed.

Vehicles that have on-board computerized systems may be damaged if the vehicle battery is jump-started. Before attempting to jump-start vehicles of this type, check the vehicle owner's manual to confirm that jump-starting is advised.

Excessive engine cranking can damage a vehicle's starter motor. If the engine fails to start after the vehicle manufacturer's recommended number of attempts, discontinue the jump-starting procedure and look for other problems that may need to be corrected.

Although this unit contains a non-spillable battery, it is recommended that it be kept upright during storage, use and recharging. To avoid possible damage that may shorten the unit's working life, protect it from direct sunlight, direct heat and/or moisture.

Check unit periodically for wear and tear. Replace worn or defective parts immediately; contact the Customer Service Department at (866) 584-5504.

Never submerge this unit in water, or expose it to rain or snow.

Keep unit out of reach of children (whether stored or in use).

Read This User's Manual Before Using This Jump-Starter.

SAVE THESE INSTRUCTIONS

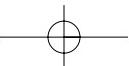


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INTRODUCTION

Thank you for choosing the **VECO13 Jump-Starter**. This compact jump-starter is unique in the amount of energy it can supply for its size. The internal battery is a high density sealed, lead-acid battery that stores and delivers energy comparable to full sized ordinary jump-starters. Please read this guide carefully before use to ensure optimum performance and avoid damage to the unit or items that you are using it with.

The **VECO13** is a compact, durable, portable jump-start system for vehicles and boats that have a standard 12 volt battery system. This self-contained, rechargeable system will start most vehicles and boats without the need for a host vehicle or 120 volt AC power supply. It can also be used as a safe, portable source of 12 volt DC electric power in remote locations and/or emergency situations. It is ideal for use with 12 volt DC cordless, portable, rechargeable products and DC/AC power inverters.

FEATURES

- Keyless ON/OFF Safety Jump-Starter Power Switch
- Cordless/rechargeable, includes AC and DC charging adapters
- Built-in non-spillable, maintenance-free, heavy duty, 17 amp/hour, sealed, lead-acid battery
- Requires no maintenance (other than recharging) for optimum operation
- Heavy duty, industrial grade copper clamps, and #6 AWG jumper cables with exclusive recessed cable holsters
- Exclusive cable storage dowels that keep jumper cables out of the way until they are needed
- 120 volt AC charger is Underwriter Laboratories safety tested and listed
- Easy-to-read LED battery charge status indicators



Battery Charge Status Indicators

A series of three LED indicators (two red and one green) display the level of charge in the battery. The left red LED indicates minimum battery charge. Charge the battery when only a single red LED is lit. The center red LED indicates moderate battery charge level. When the green LED is lit, the battery is at full charge. The charge status LEDs will light when the charge status pushbutton is pressed, or automatically during AC recharge operation. During DC charging, the charge status pushbutton can be pressed periodically to monitor recharging progress.

12 Volt DC Accessory Outlet

This accessory outlet is provided for use with appliances that are 12 volt DC compatible. The DC accessory outlet also allows for DC recharging from a vehicle or other 12 volt source.

AC Recharge Port

Located just below the 12 volt DC outlet, the AC port is also covered by a rubber cap. The AC recharge adapter's barrel connector plugs into this port during recharge.

Applications

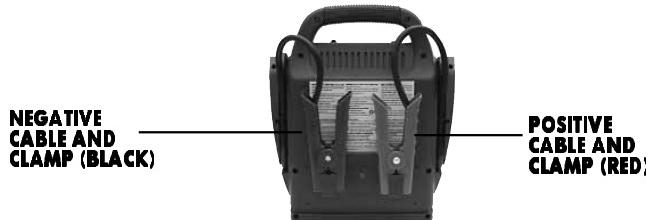
- Jump-start most engines with standard 12 volt DC battery systems, such as boats, small trucks, cars, airplanes, RVs, personal watercraft, snowmobiles, tractors, etc.
- Using the 12 volt accessory outlet, operate such appliances as 12 volt DC fans, fluorescent worklights, air compressors, spotlights, TVs, portable radios, cassette or CD players. The unit can quick-charge a cellular phone by using the phone's 12 volt DC adapter cord.
- Illuminate areas under the hood, inside tents and work areas.

USING THE UNIT AS A JUMP-STARTER

This Jump-Start is equipped with a safety Power Switch that only allows energy to flow when proper connections are made to battery and frame. Once the connections are properly made, turn the switch ON to jump-start the vehicle.

1. Turn OFF vehicle ignition and all accessories (radio, A/C, lights, connected cell phone chargers, etc.). Place vehicle in "park" and set the emergency brake.

2. Make sure the Jump-Start Power Switch is turned to OFF.
3. Remove jumper clamps from clamp tabs. **Connect the RED clamp first, then the BLACK clamp.**



4. Procedure for jump-starting a NEGATIVE GROUNDED SYSTEM (negative battery terminal is connected to chassis) (MOST COMMON)
 - 4a. Connect POSITIVE (+) RED clamp to vehicle battery's POSITIVE terminal.
 - 4b. Connect NEGATIVE (-) BLACK clamp to chassis or a solid, non-moving, metal vehicle component or body part. NEVER CLAMP DIRECTLY TO NEGATIVE BATTERY TERMINAL OR MOVING PART.
5. Procedure for jump-starting POSITIVE GROUND SYSTEMS

Note: In the rare event that the vehicle to be started has a POSITIVE GROUNDED SYSTEM (positive battery terminal is connected to chassis), replace steps 4a and 4b above with steps 5a and 5b, then proceed to step 6.

 - 5a. Connect NEGATIVE (-) BLACK clamp to vehicle battery's NEGATIVE terminal.
 - 5b. Connect POSITIVE (+) RED CLAMP to vehicle chassis or a solid, non-moving, metal vehicle component or body part. NEVER CLAMP DIRECTLY TO POSITIVE BATTERY TERMINAL OR MOVING PART.
6. When clamps are connected properly, turn the Jump-Start Power Switch to ON.
7. Turn ON the ignition and crank the engine in 5-6 second bursts until engine starts.
8. Turn the Jump-Start Power Switch back to the OFF position.
9. Disconnect the NEGATIVE (-) engine or chassis clamp first, then disconnect the POSITIVE (+) battery clamp.

FOLLOW ALL SAFETY INSTRUCTIONS FOUND ON PAGES ii AND iii OF THIS MANUAL.

⚠ CAUTIONS

- If the audible Reverse Connection Polarity Alarm sounds after clamps are connected to vehicle battery, reverse clamp connections.
- If vehicle fails to start, turn OFF the ignition, turn OFF the Jump-Start Power Switch, disconnect the jump-start system's leads and investigate why the engine did not start.
- Recharge this unit fully after each use.

⚠ WARNINGS

- Jump-Start Power Switch should be OFF prior to jump-starting.
- This power system is to be used ONLY on vehicles or boats with 12 volt DC battery systems.
- Never touch red and black clamps together — this can cause dangerous sparks, power arcing, and/or explosion.

- Vehicles that have on-board computerized systems may be damaged if vehicle battery is jump-started. Before jump-starting this type of vehicle, read the vehicle manual to confirm that external starting assistance is advised.**
- Excessive engine cranking can damage the vehicle's starter motor. If the engine fails to start after the recommended number of attempts, discontinue jump-start procedure and look for other problems that need to be corrected.**
- After use, turn the Jump-Starter Power Switch OFF.**
- Replace worn or defective parts immediately — contact the Customer Service Department toll free (866) 584-5504.**

USING THE UNIT AS A 12 VOLT DC PORTABLE POWER SUPPLY

This portable power source is also for use with all 12 volt DC accessories equipped with a male accessory outlet plug that are rated up to 5 amps.

1. Lift up the cover of the unit's 12 volt DC outlet.
2. Insert the 12 volt DC plug from the appliance into the 12 volt accessory outlet on the unit.
3. Switch on the appliance and operate as usual.
4. Periodically press the Battery Charge Level Pushbutton to check battery status.

Estimated 12 Volt DC Operation Time

Appliance	Estimated Power Usage (Watts)	Operating Time (hours)
Cell phone	1	108 (talk time)
Fluorescent light	4	27
Radio, fan, depth finder	9	12
Camcorder, VCR, spotlight	15	7
Power tools, bilge pump	24	4.5
Car vacuum	80	1.35

Note: All times are approximate and based upon a fully charged unit.

⚠ CAUTION

Make sure that the Jump-Starter Power Switch is ALWAYS in the OFF position when using the unit's 12 volt DC accessory outlet.

DO NOT operate appliances that draw more than 5 amps.

⚠ WARNING

NEVER INSERT A CIGARETTE LIGHTER INTO THE UNIT'S ACCESSORY OUTLET.

USING THE LED AREA LIGHT

Located on the center of the control panel, the LED Area Light provides proper lighting while changing a tire or connecting the unit to a battery. It is controlled by the Area Light Power Switch located directly above the Area Light.

CARE AND MAINTENANCE

This product has a sealed lead acid battery that should be kept fully charged. Recharge before first use, immediately after each use, and every 60 days if not used. Failure to do this may reduce the battery life dramatically.

Note: This unit is delivered in a partially charged state — you must fully charge it before using it for the first time. Initial AC charge should be 40 hours.

Charging/Recharging

Lead-acid batteries require routine maintenance to ensure a full charge and long battery life. All batteries lose energy from self-discharge over time and more rapidly when they are at higher temperatures. Therefore, batteries need periodic charging to replace energy lost through self-discharge. When the unit is not in use, it is recommended that the battery is recharged at least every 60 days.

Check the battery charge level by pressing the battery status button. The LED charge status display will indicate the level of battery charge. When only one red LED lights, recharge the unit.

Note: Recharging battery after each use will prolong battery life; frequent heavy discharges between recharges and/or overcharging will reduce battery life.

The battery can be recharged using an AC or DC adapter (see below).



⚠ CAUTION

Make sure ON/OFF Power Switch and Area Light are turned OFF during recharge as this may slow recharge function.

AC Recharge

The AC recharge adapter is a UL listed "wall" type unit that operates from any 120 volt, 60 Hz AC supply that has a standard North American outlet. The adapter has a barrel connector that plugs into the unit's recharge port.

Make sure the Jump-Starter Power Switch and Area Light Power Switch are turned OFF during AC recharge. When an AC recharge adapter is plugged into the recharge port, the battery charge level display will automatically activate. As recharge progresses, the red LEDs will light, one by one. Charge the unit until the battery charge level display lights or flashes the green FULL LED. Continue to recharge for one to two hours, and then disconnect the recharge adapter. AC recharge system is an automatic taper charge and can be left connected to the main unit for long periods. (See the illustration on page 2 of this manual for AC recharge port location).

DC to DC Recharge

Recharging the Jump-Starter from an external DC power source requires the use of the DC/DC adapter. This adapter has a male DC connector at each end.

Unlike the AC recharge method, DC recharge does NOT automatically activate the "battery status" display and provide a taper charge. Battery status can still be monitored by pressing the battery status level pushbutton.

⚠️ WARNINGS

- **DO NOT DC charge for more than 3-4 hours maximum.**
- **DO NOT leave unattended while DC charging.**

12 Volt DC Charging

1. Insert the gold-tipped DC/DC charging adapter plug into the vehicle's 12 volt DC accessory outlet.
2. Insert the silver-tipped end plug into the 12 volt DC accessory outlet on the front panel of the unit.
3. Charge the unit until the green FULL indicator lights when the battery status level pushbutton is pressed. DO NOT EXCEED 3-4 HOURS MAXIMUM.
4. When charging is completed, remove the charging cord and store in a safe place.

Note: Make sure ON/OFF Safety Switch and Area Light are Turned OFF During Recharge As This May Slow Recharge

Replacement Parts

For replacement parts (bulbs, batteries, charging adapters, etc.), contact Vector Technical Support: toll free (866) 584-5504. There are no user serviceable parts inside the unit. Periodically, the cables and connectors should be inspected for damage, corrosion, dust, and dirt. If surfaces are dirty, they can be wiped clean with a cloth moistened with water and a drop of detergent. Contacts can be wiped clean with a dry cloth.

⚠️ WARNING

Do not operate unit if there is any evidence of damage. The product must be returned to Vector for testing and repair. Replace any damaged charging adapters immediately before further use.

Battery Disposal

Contains a maintenance-free, sealed, non-spillable, lead acid battery, which must be disposed of properly. Recycling is required — contact your local authority for information. Failure to comply with local, state and federal regulations can result in fines or imprisonment. For more information on recycling this battery, call toll-free (800) 822-8837.



⚠️ CAUTION

This plug uses an 8 amp fuse. For continued protection against risk of fire, replace fuse only with same type and rating.

⚠️ WARNINGS

Do not dispose of the battery in fire, as this may result in an explosion.

Before disposing of the battery, protect exposed terminals with heavy-duty electrical tape to prevent shorting (shorting can result in injury or fire).

Do not expose battery to fire or intense heat, as it may explode.

TROUBLESHOOTING

Unit Fails to Jump-Start

- Make sure unit's power switch is in the ON position.
- Check that Jump-Starter has a full charge.
- Make sure a proper polarity cable connection has been established (see "Using the Unit as a Jump-Starter," page 4).

12 Volt Outlet Fails to Deliver Power

- Make sure a proper 12 volt adapter connection has been established.
- Check that Jump-Starter has a full charge.

12 Volt Outlet Shuts Off

Disconnect unit and allow to cool for 10 minutes.

Note: When pulling more than 5 amps from the 12 volt outlet, unit will shut off.

LED Area Light Does Not Come On

- Check that Jump-Starter has a full charge.

SPECIFICATIONS

Jump-Start Clamps:	400 amps – heavy-duty copper
Jumper Cables:	#6AWG welding cable
Battery Type:	12 volt, 17 Ah sealed, rechargeable, non-spillable lead acid
LED Area Light:	Long-life white LEDs
DC Charging Adapter:	12 volt DC
AC Charting Adapter:	120 volt AC (700mA, 12 volt DC output)
12 Volt Outlet Output:	Overload protection